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We claim:

1. A composition for delivery of a therapeutic, prophylactic or diagnostic agent comprising:

a nanoparticulate carrier comprising therapeutic, prophylactic or diagnostic agent to be delivered, and

a targeting molecule bound to the surface of the carrier, wherein the carrier is targeted to a specific population of cells where the agent is to be delivered.

- 2. The composition of claim 1 wherein the carrier is selected from the group consisting of liposomes and microparticles.
- 3. The composition of claim 2 wherein the microparticles are formed of the agent to be delivered.
- 4. The composition of claim 2 wherein the microparticles are formed of a polymeric material.
- 5. The composition of claim 1 wherein the agent to be delivered is a cytotoxic compound.
- 6. The composition of claim 1 wherein the targeting molecule is a hormone.
- 7. The composition of claim 1 further comprising a gel enhancing uptake of the carrier into a cell.
- 8. A method of delivering a therapeutic, prophylactic or diagnostic agent comprising administering to a patient or tissue the composition of any of claims 1-7.
- 9. The method of claim 8 wherein the composition is administered to sterilize an animal.
- 10. The method of claim 8 wherein the composition is administered to treat cancer or endometriosis.
- 11. The method of claim 8 wherein the composition is administered by injection.
- 12. The method of claim 8 wherein the composition is administered by pulmonary or intranasal or intravaginal or intrarectal delivery.